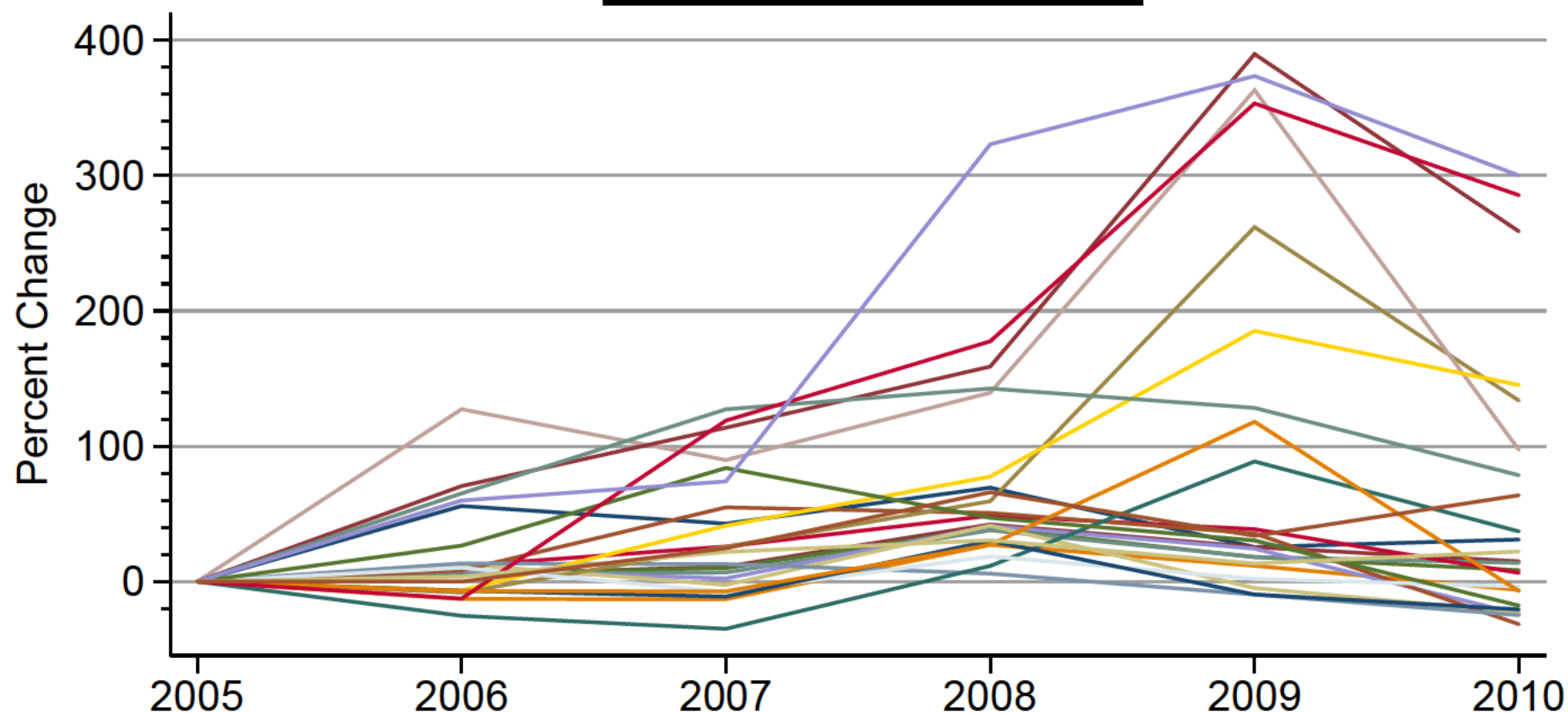


## Exhibit 1 Adobe

### There is Substantial Variation in the Cumulative Change in Total Compensation Among Employees with the Same 2005 Job

Adobe – [REDACTED]



Notes:

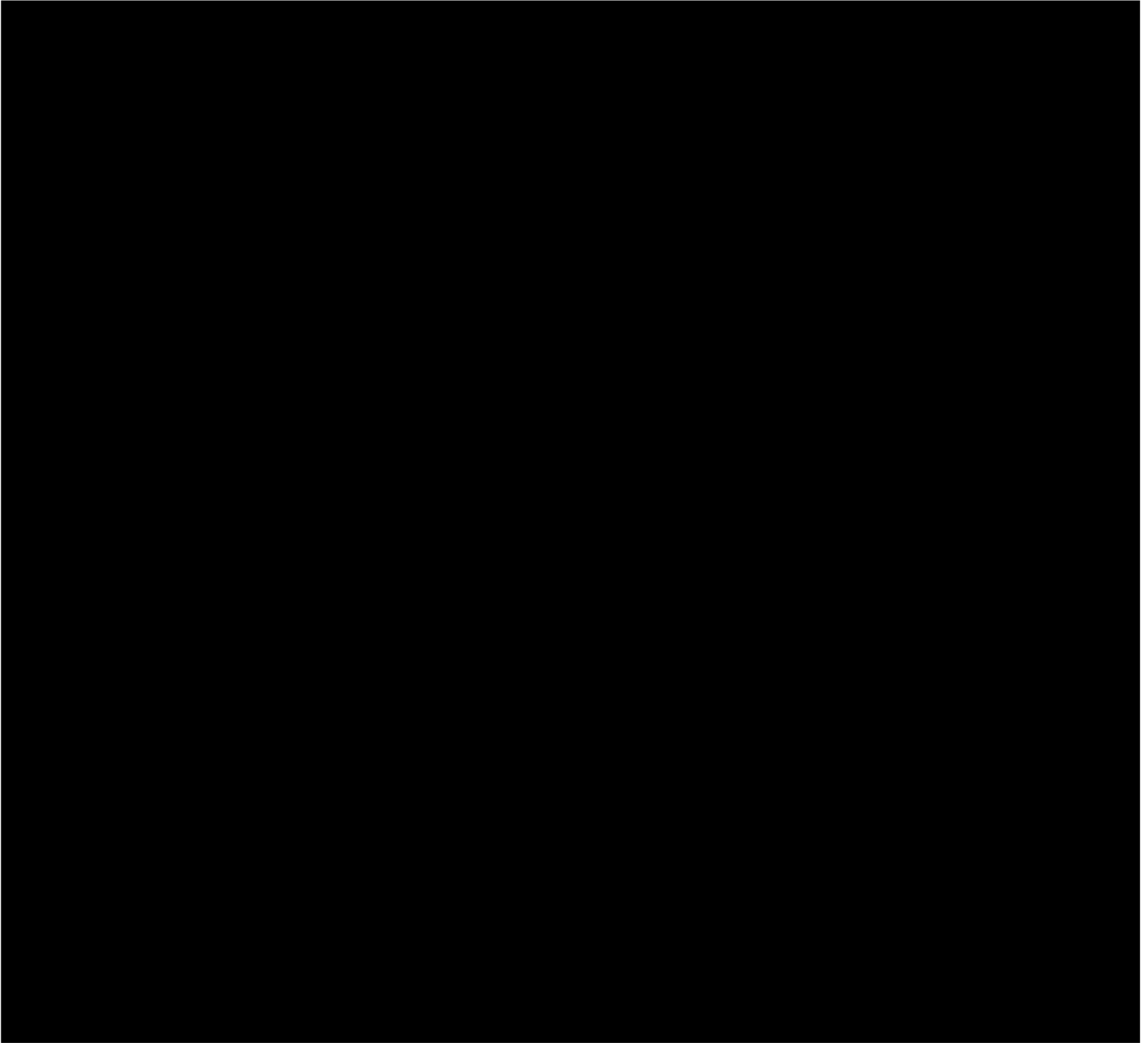
[1] Each line represents the cumulative compensation change for an individual employee.

[2] Data are restricted to those employees who remained in RD class positions through 2010. I then selected the Adobe job title with 25 employees (or the closest number to 25).

Source: Dr. Leamer's backup data and materials.

## **Exhibit 1 Apple & Google**

### **There is Substantial Variation in the Cumulative Change in Total Compensation Among Employees with the Same 2005 Job**



Notes:

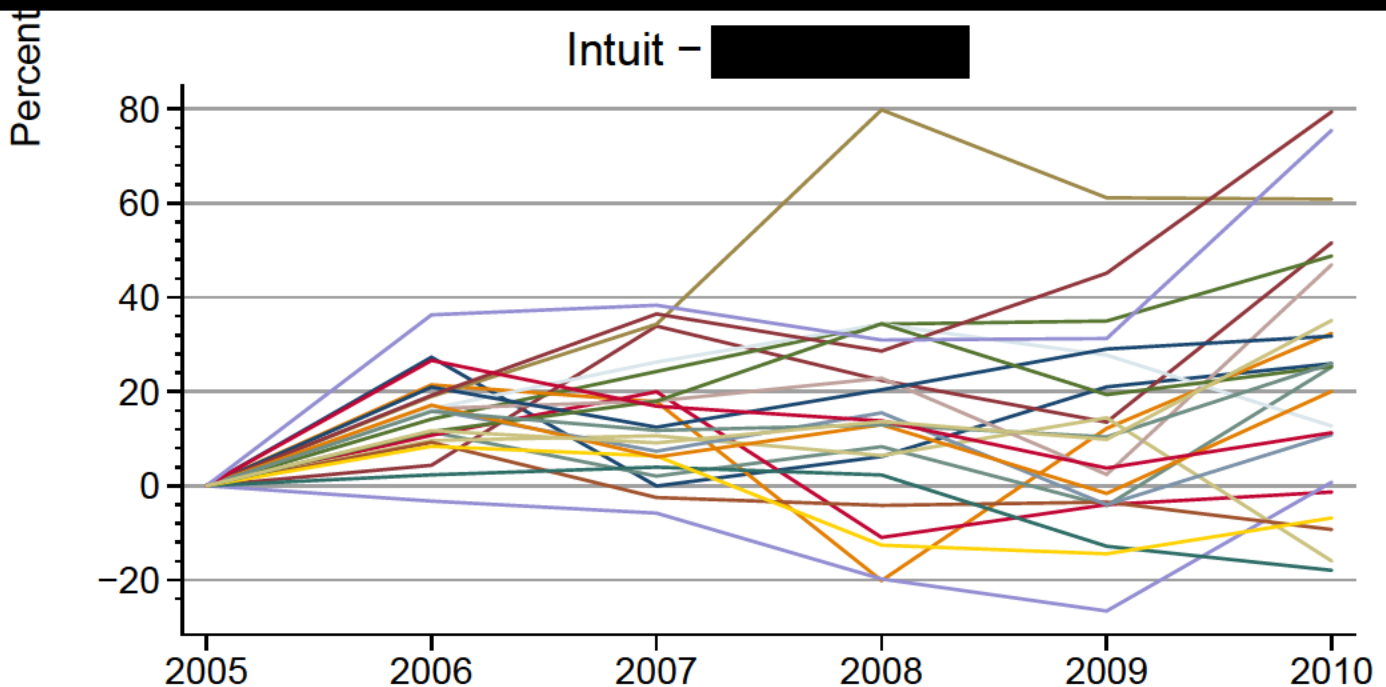
[1] Each line represents the cumulative compensation change for an individual employee.

[2] Data are restricted to those employees who remained in RD class positions through 2010. I then selected from each Defendant the job title that included 25 employees (or the closest number to 25).

Source: Dr. Leamer's backup data and materials.

## Exhibit 1 Intel & Intuit

**There is Substantial Variation in the Cumulative Change in Total Compensation Among Employees with the Same 2005 Job**



Notes:

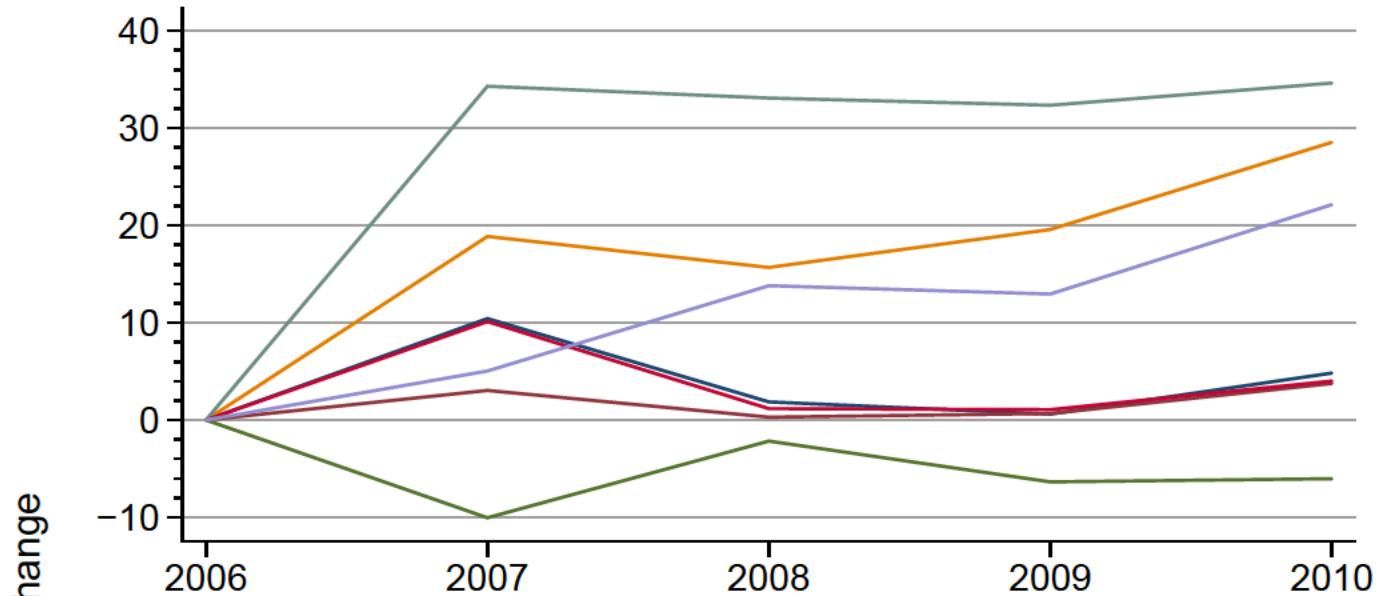
- [1] Each line represents the cumulative compensation change for an individual employee.
- [2] Data are restricted to those employees who remained in RD class positions through 2010. I then selected from each Defendant the job title that included 25 employees (or the closest number to 25).

Source: Dr. Leamer's backup data and materials.

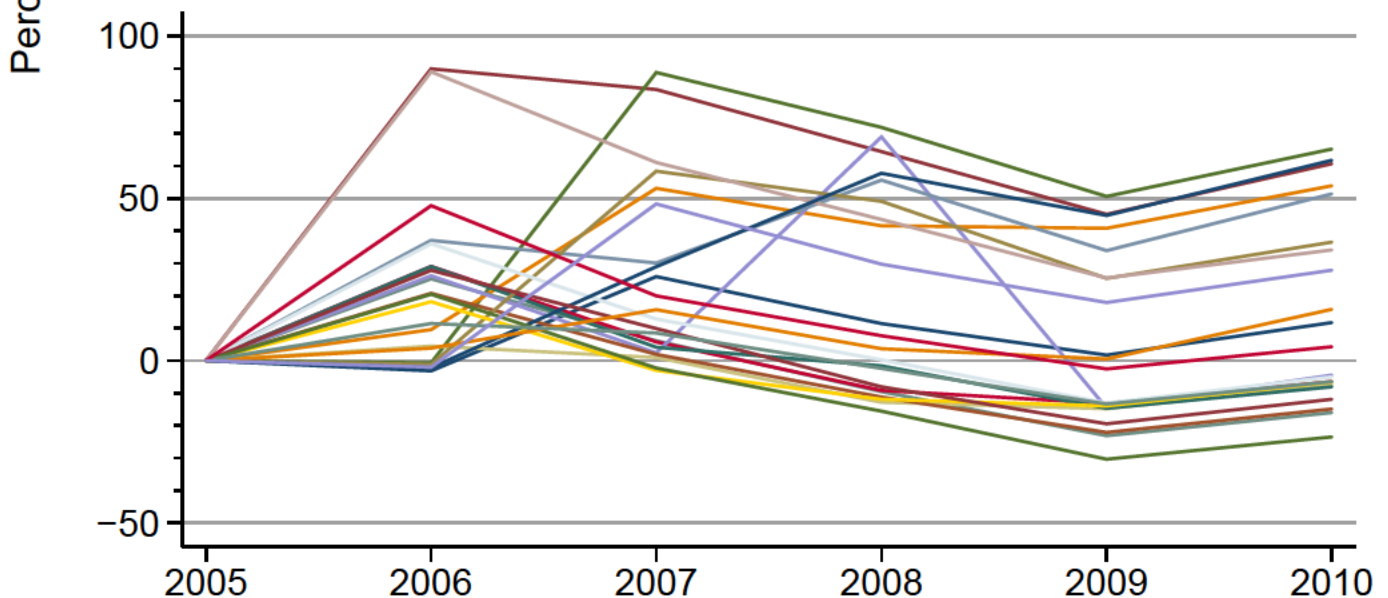
## Exhibit 1 Lucasfilm & Pixar

**There is Substantial Variation in the Cumulative Change in Total Compensation Among Employees with the Same 2005 Job**

Lucasfilm – SENIOR R&D ENGINEER



Pixar – ENGINEER SOFTWARE



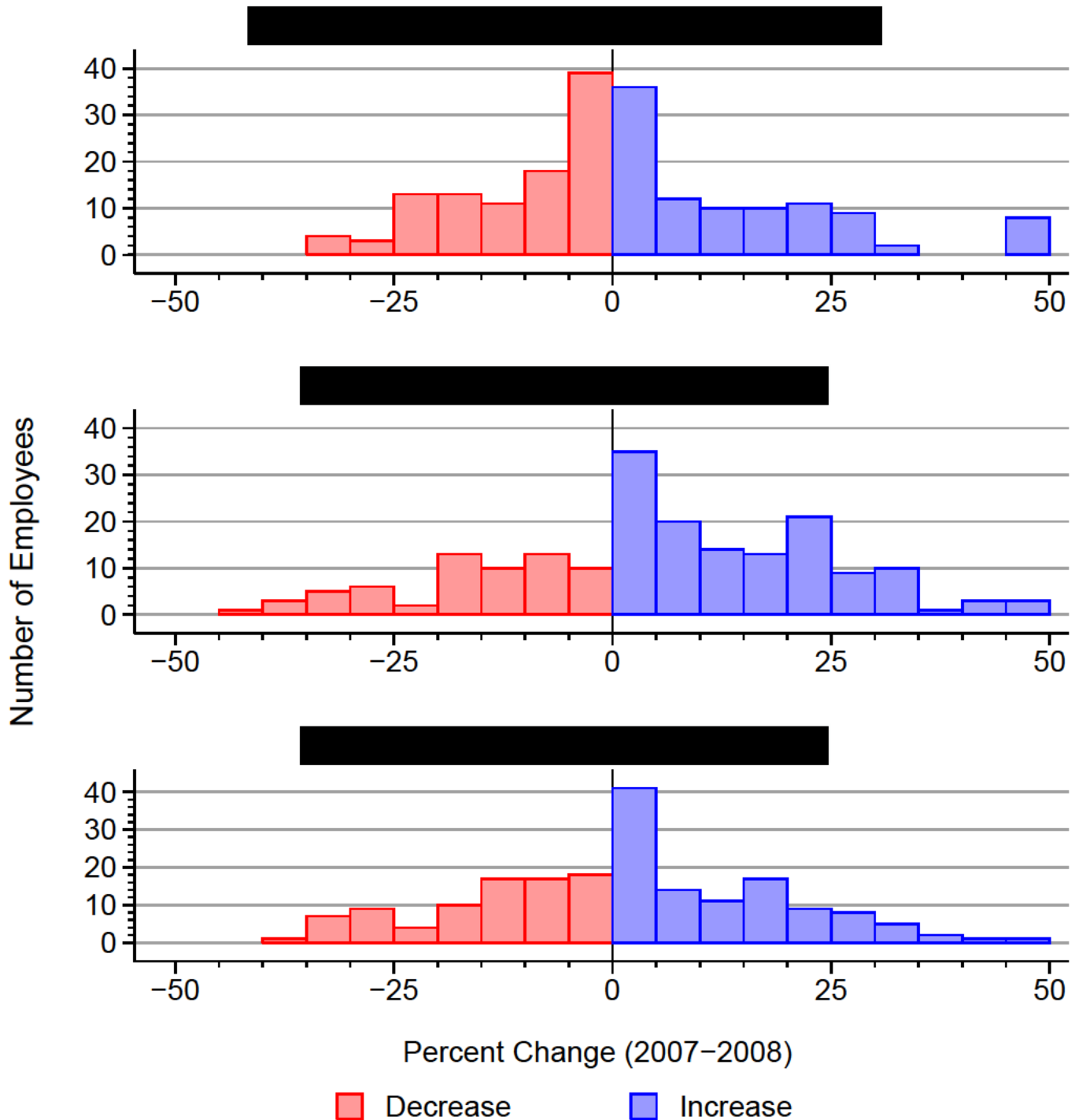
**Notes:**

- [1] Each line represents the cumulative compensation change for an individual employee.
- [2] Data are restricted to those employees who remained in RD class positions through 2010. I then selected from each Defendant the job title that included 25 employees (or the closest number to 25).
- [3] The Lucasfilm chart begins in 2006, which is the first year for which I have data on Lucasfilm job titles.

Source: Dr. Leamer's backup data and materials.

## Exhibit 2 Adobe

### There is Substantial Variation in Total Compensation Changes Among Employees in the Same Job in 2007



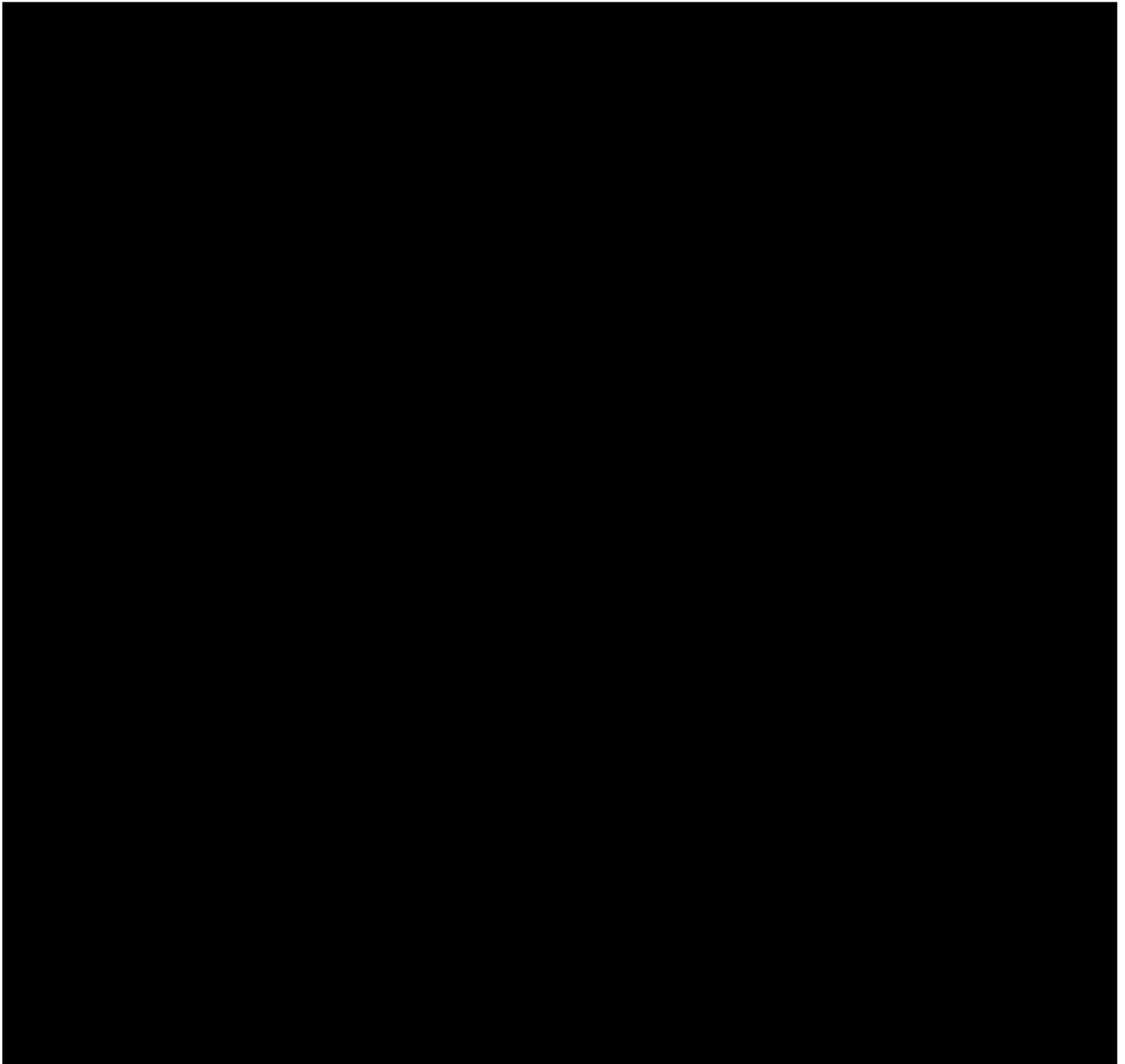
**Notes:**

- [1] The top 3 Adobe jobs by 2007 employment are shown. See Appendix B for additional jobs and years.
- [2] Some large positive and large negative changes may be capped at +/-50 percent for ease of display.

Source: Dr. Leamer's backup data and materials.

## Exhibit 2 Apple

### There is Substantial Variation in Total Compensation Changes Among Employees in the Same Job in 2007



Decrease



Increase

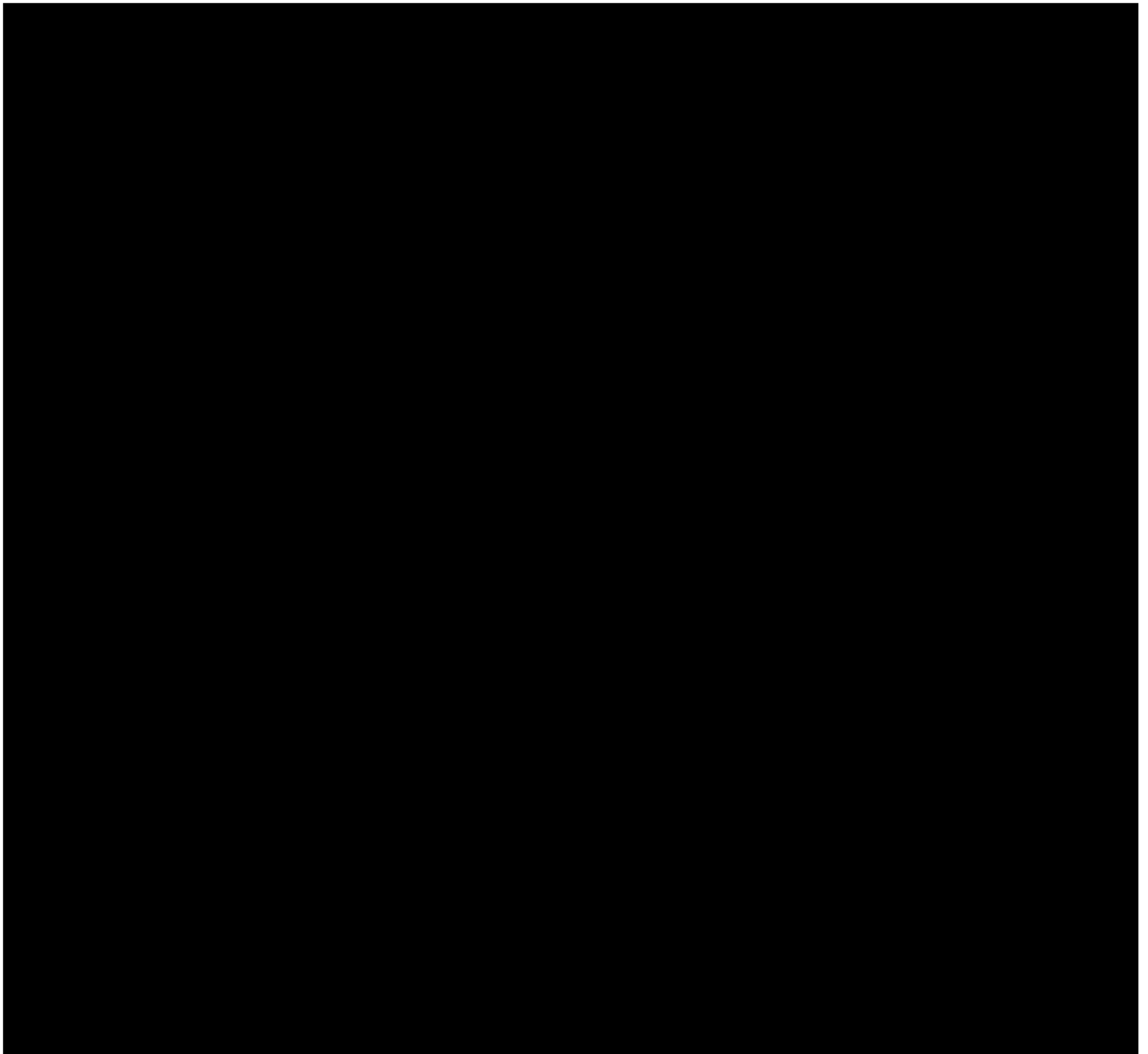
Notes:

- [1] The top 3 Apple jobs by 2007 employment are shown. See Appendix B for additional jobs and years.
- [2] Some large positive and large negative changes may be capped at +/-75 percent for ease of display.

Source: Dr. Leamer's backup data and materials.

## Exhibit 2 Google

### There is Substantial Variation in Total Compensation Changes Among Employees in the Same Job in 2007



Decrease



Increase

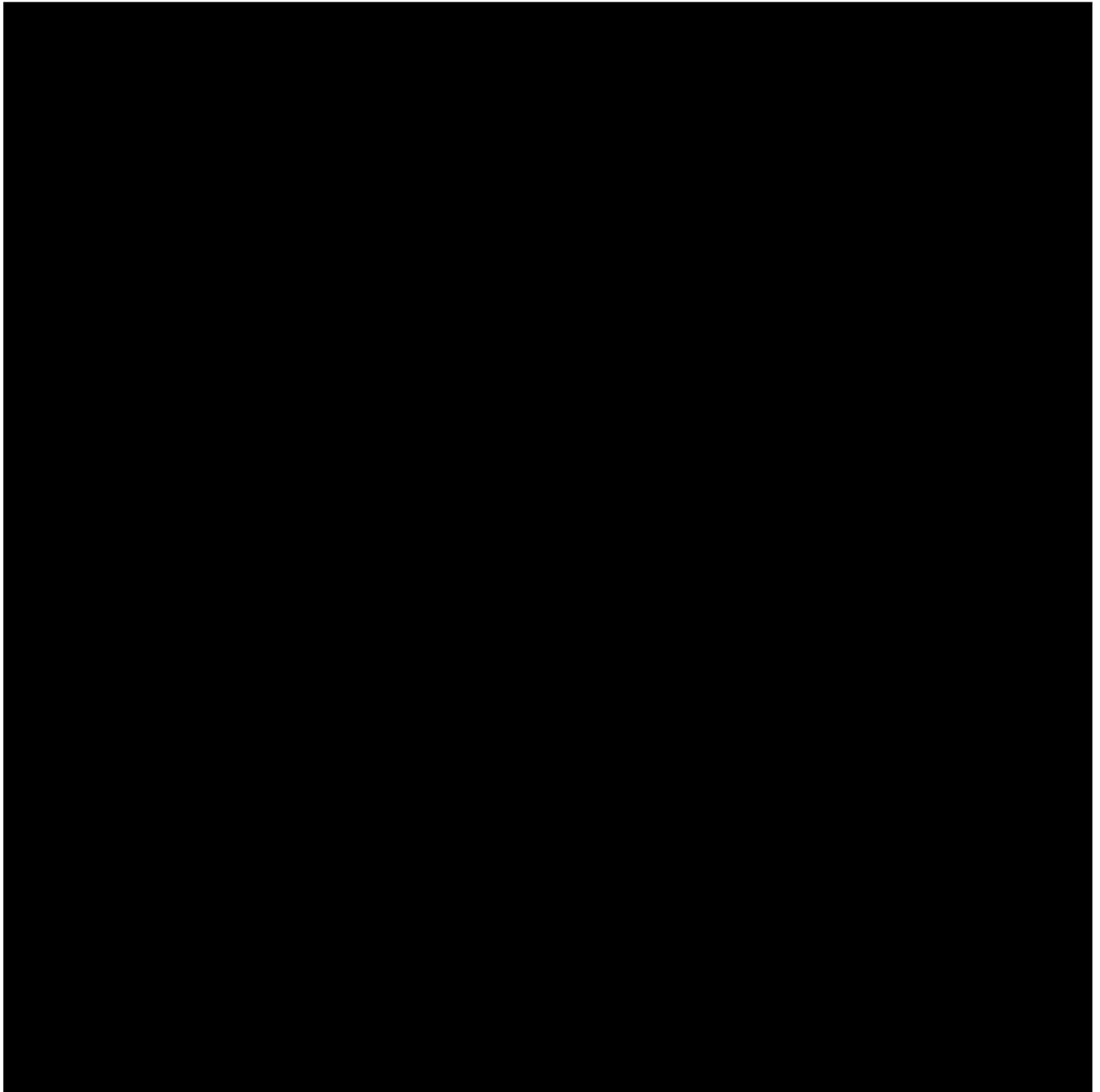
Notes:

- [1] The top 3 Google jobs by 2007 employment are shown. See Appendix B for additional jobs and years.
- [2] Some large positive and large negative changes may be capped at +/-75 percent for ease of display.

Source: Dr. Leamer's backup data and materials.

## **Exhibit 2 Intel**

### **There is Substantial Variation in Total Compensation Changes Among Employees in the Same Job in 2007**



Notes:

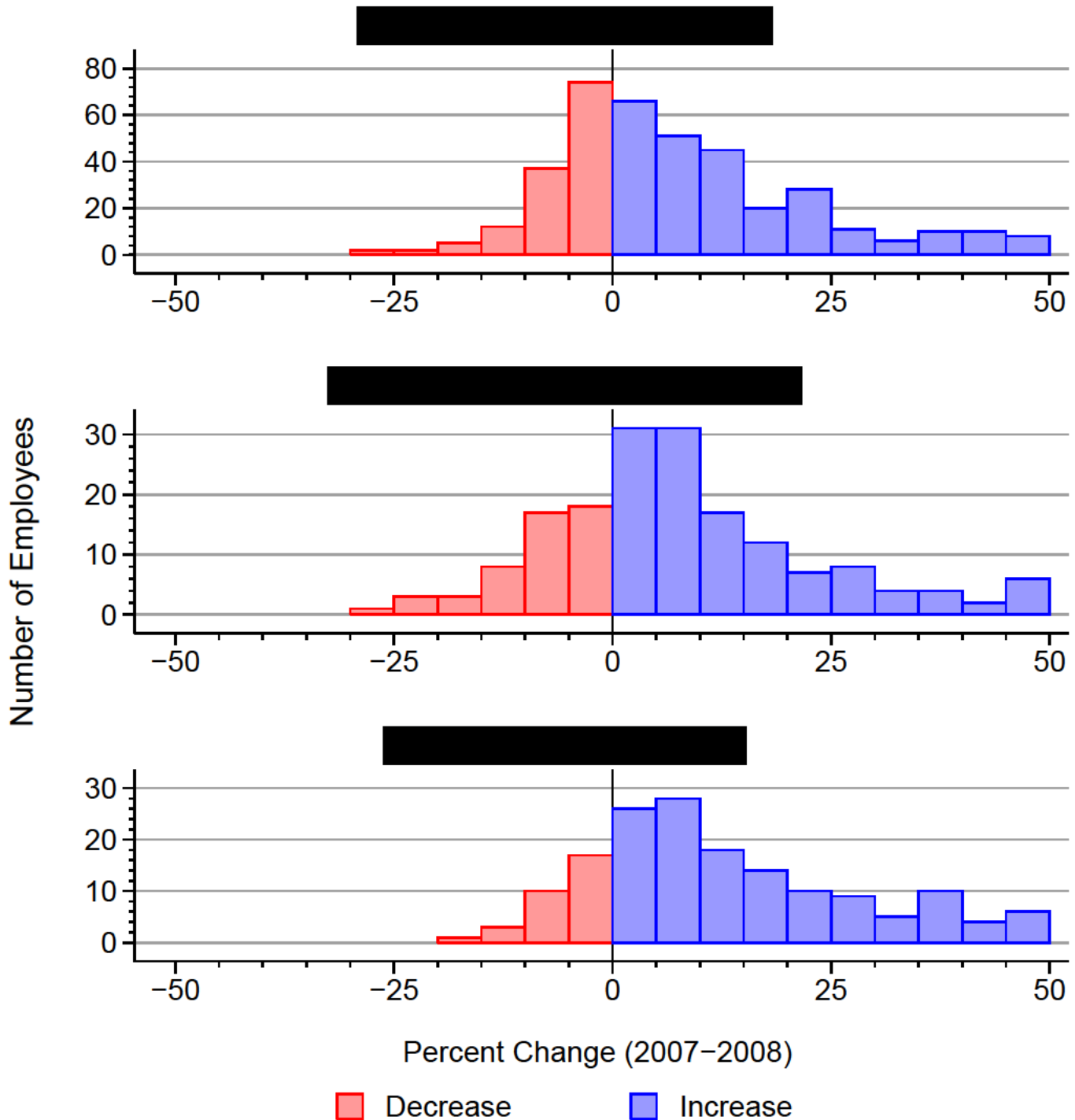
- [1] The top 3 Intel jobs by 2007 employment are shown. See Appendix B for additional jobs and years.
- [2] Some large positive and large negative changes may be capped at +/-50 percent for ease of display.

Source: Dr. Leamer's backup data and materials.



## Exhibit 2 Intuit

### There is Substantial Variation in Total Compensation Changes Among Employees in the Same Job in 2007



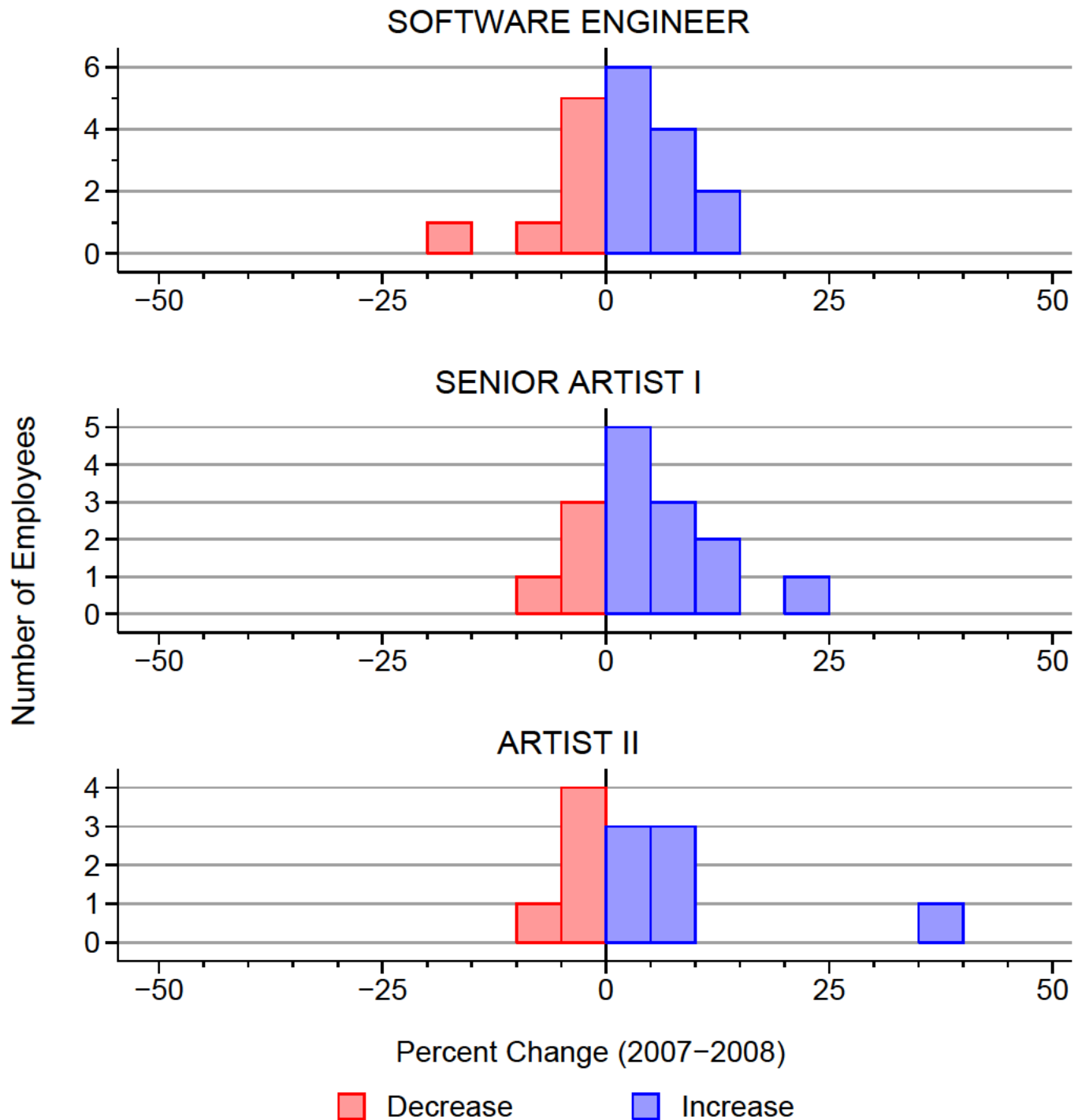
Notes:

- [1] The top 3 Intuit jobs by 2007 employment are shown. See Appendix B for additional jobs and years.
- [2] Some large positive and large negative changes may be capped at +/-50 percent for ease of display.

Source: Dr. Leamer's backup data and materials.

## Exhibit 2 Lucasfilm

### There is Substantial Variation in Total Compensation Changes Among Employees in the Same Job in 2007



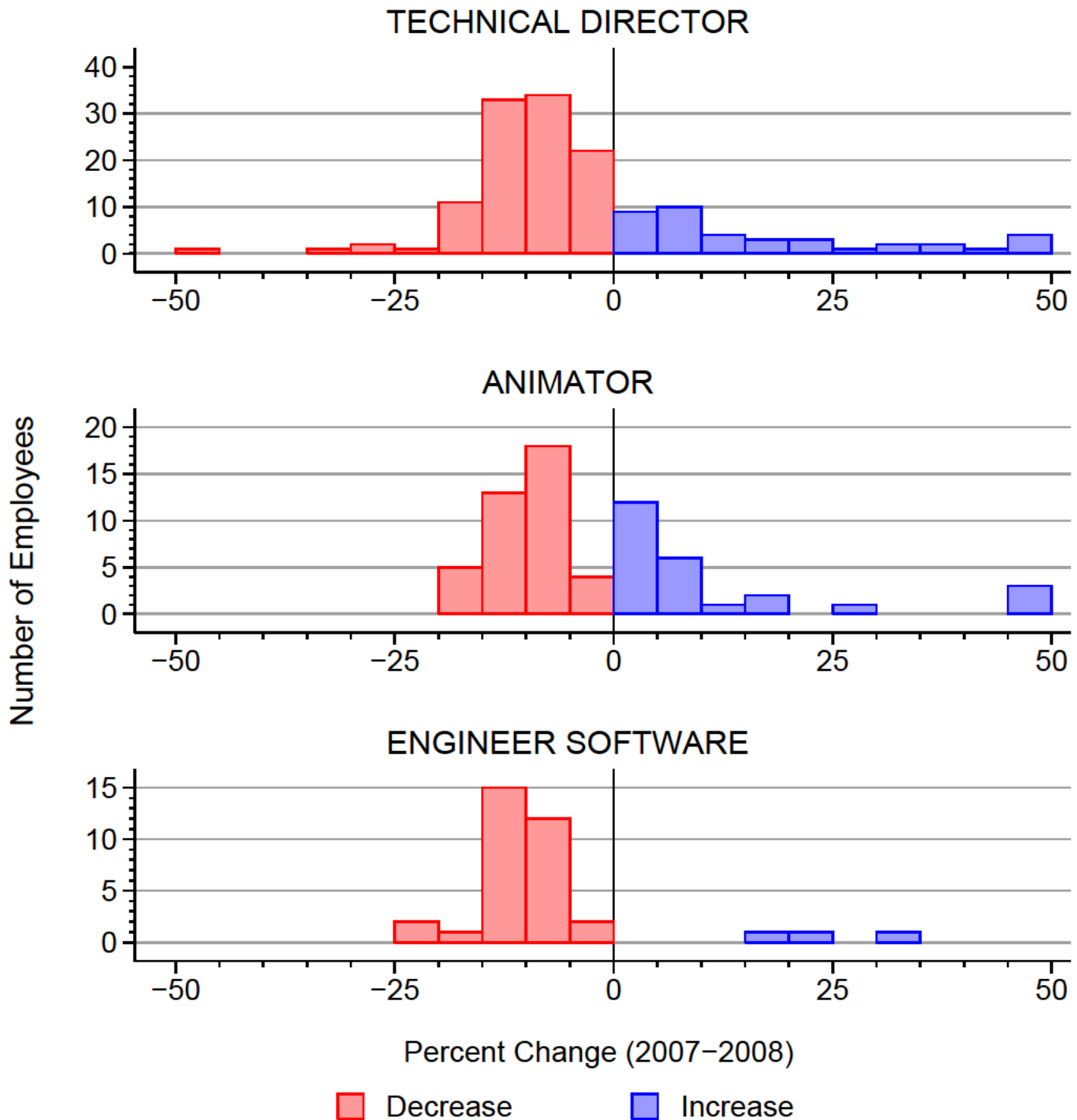
**Notes:**

- [1] The top 3 Lucasfilm jobs by 2007 employment are shown. See Appendix B for additional jobs and years.
- [2] Some large positive and large negative changes may be capped at +/-50 percent for ease of display.

Source: Dr. Leamer's backup data and materials.

## Exhibit 2 Pixar

### There is Substantial Variation in Total Compensation Changes Among Employees in the Same Job in 2007



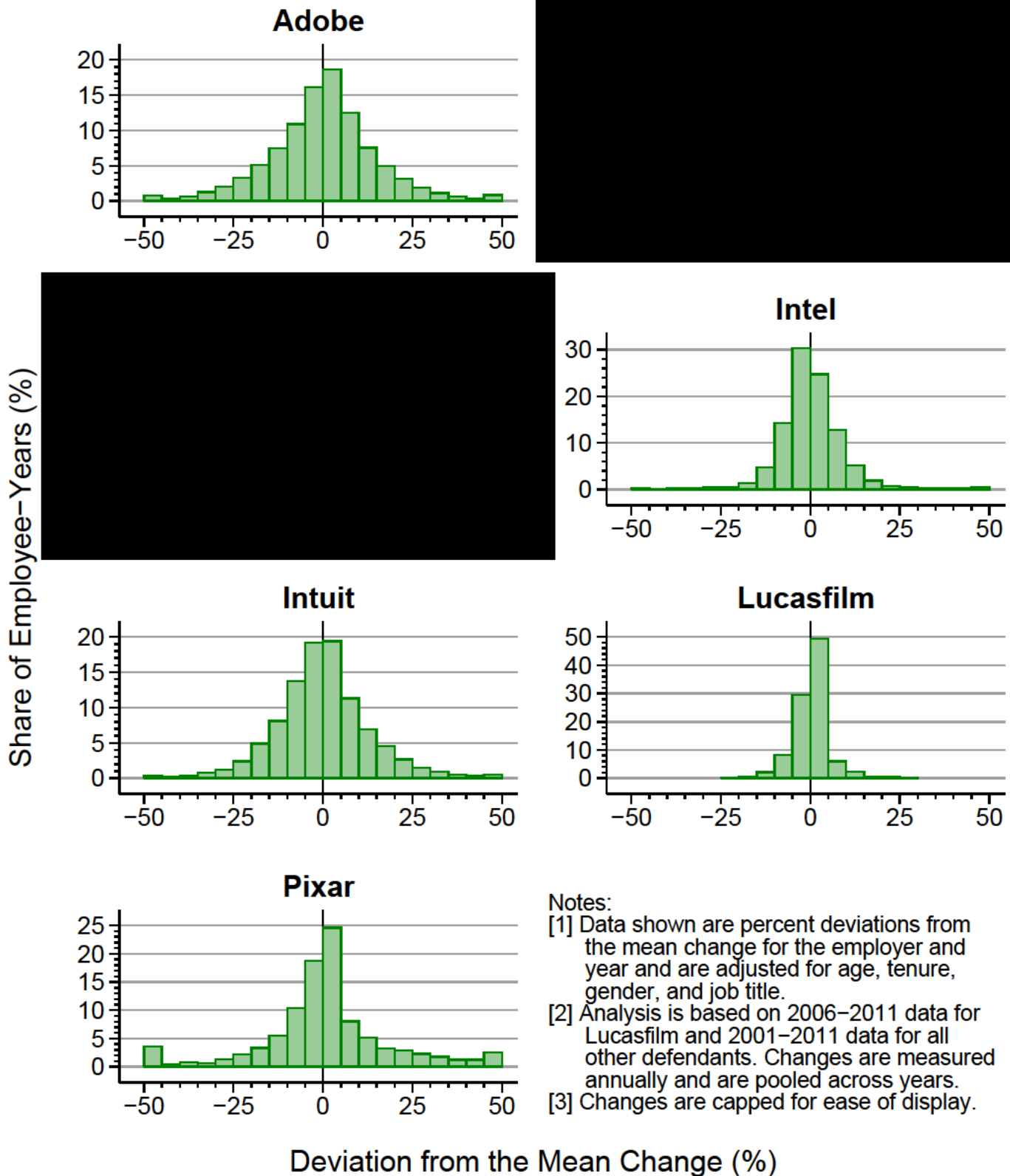
Notes:

- [1] The top 3 Pixar jobs by 2007 employment are shown. See Appendix B for additional jobs and years.
- [2] Some large positive and large negative changes may be capped at +/-50 percent for ease of display.

Source: Dr. Leamer's backup data and materials.

## Exhibit 3

### There is Substantial Variation in Changes in Employee Total Compensation (Adjusted for Individual Characteristics and Job)



Source: Dr. Leamer's backup data and materials.

## Exhibit 4

**There Are Large Differences in Compensation Changes Between the Employees with the Lowest Changes and Those with the Highest**

Employer	Percent Deviation from Mean Compensation Change			
	Bottom Decile	Bottom Quartile	Top Quartile	Top Decile
Adobe	-29%	-19%	19%	29%
██████	██████	██████	██████	██████
Google	-72%	-44%	47%	78%
Intel	-17%	-11%	11%	19%
Intuit	-24%	-16%	17%	26%
Lucasfilm	-9%	-5%	6%	10%
Pixar	-45%	-25%	25%	42%

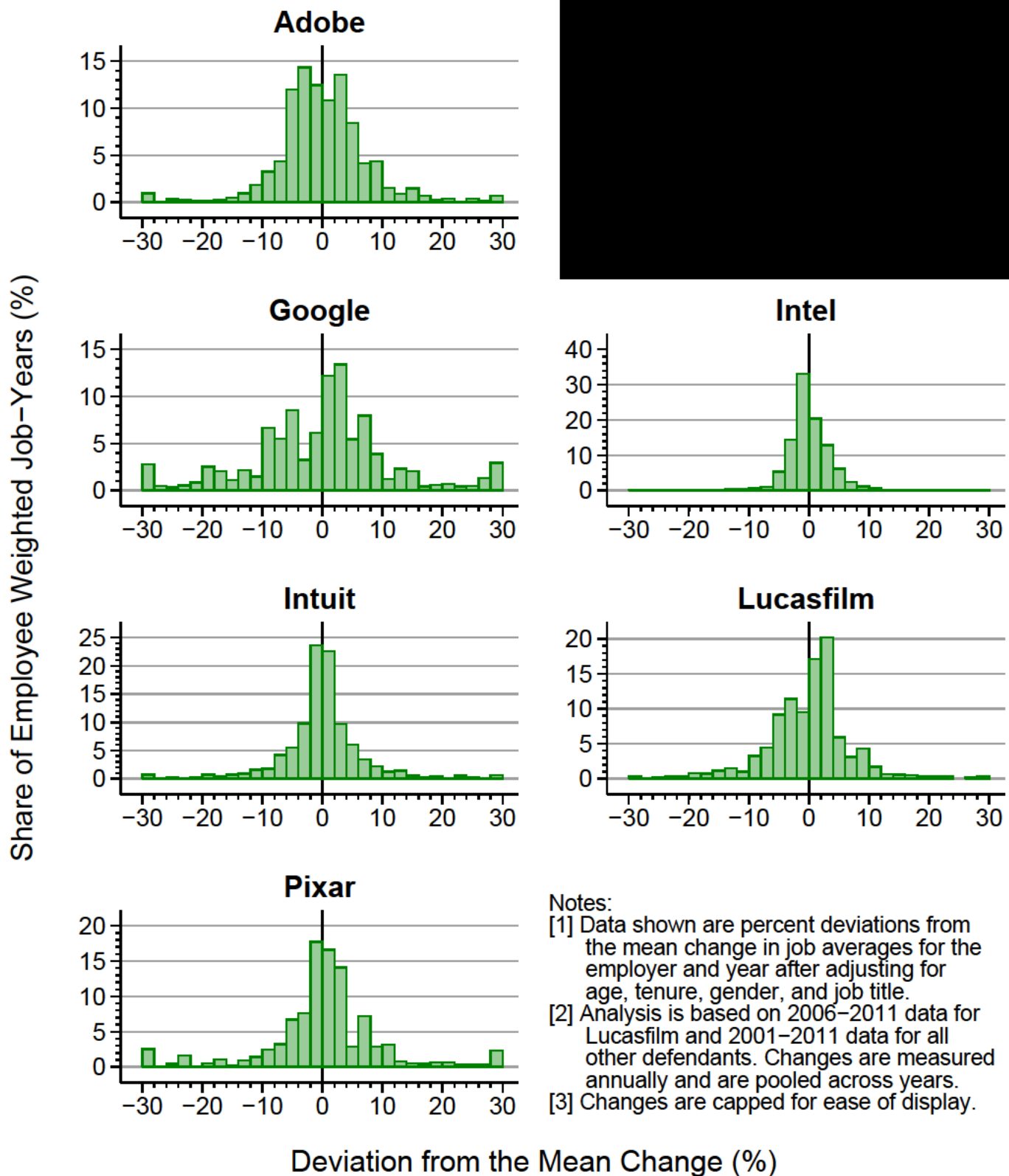
Notes:

- [1] Data shown are percent deviations from the average change for the employer and year after adjusting for age, tenure, gender, and job title.
- [2] Percent deviations shown are averages within each decile or quartile.
- [3] Analysis is based on 2006-2011 data for Lucasfilm and 2001-2011 data for other defendants.
- [4] Deciles and quartiles are based on the share of employee years at each defendant.

Source: Dr. Leamer's backup data and materials.

## Exhibit 5

### There is Substantial Variation in Changes in Job Average Total Compensation (Adjusted for Individual Characteristics and Job)



Source: Dr. Leamer's backup data and materials.

## Exhibit 6

### There Are Large Differences in the Changes in Average Compensation Between Jobs with the Lowest Changes and Those with the Highest

Employer	Percent Deviation from Mean Change in Job Average			
	Bottom Decile	Bottom Quartile	Top Quartile	Top Decile
Adobe	-15%	-9%	10%	16%
Google	-29%	-19%	16%	29%
Intel	-6%	-4%	5%	7%
Intuit	-14%	-8%	8%	14%
Lucasfilm	-14%	-9%	8%	13%
Pixar	-27%	-14%	13%	23%

Notes:

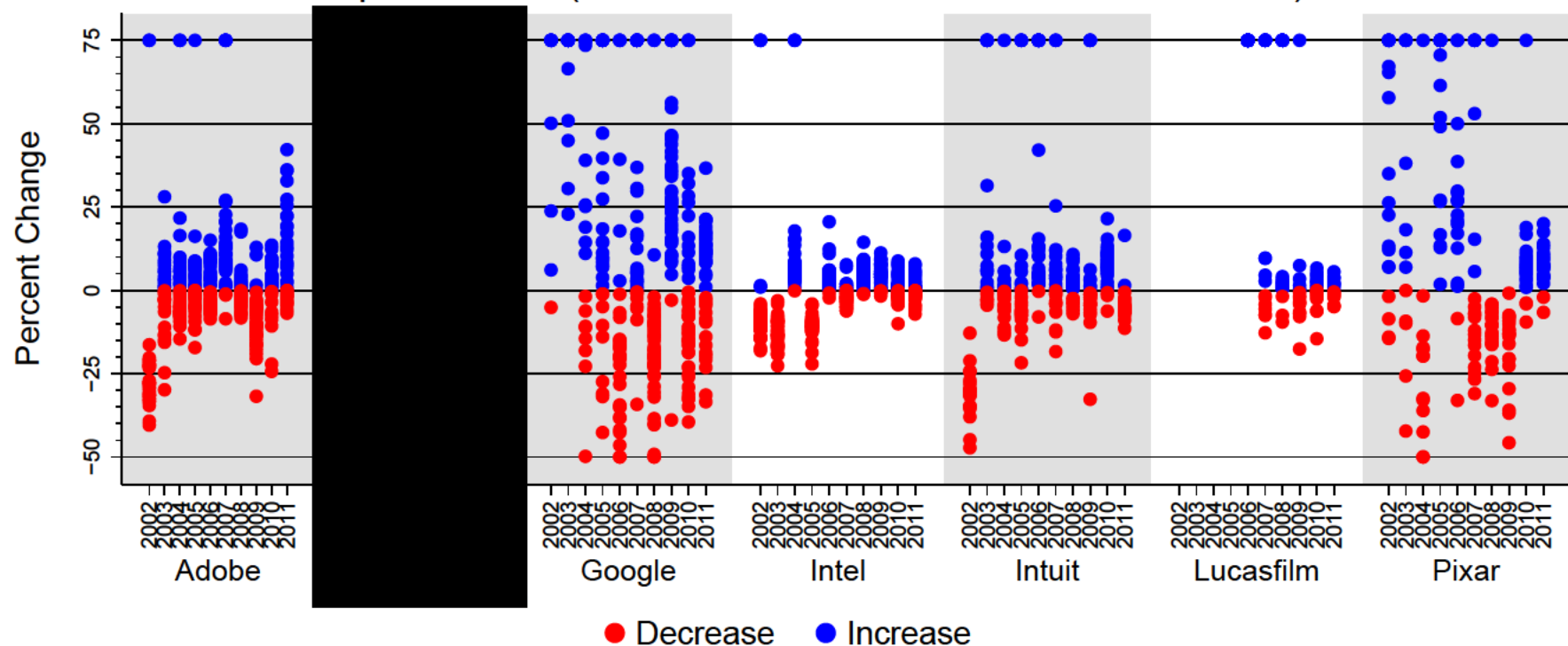
- [1] Data shown are percent deviations from the mean change (weighted by employees) in job averages for the employer and year after adjusting for age, tenure, gender, and job title.
- [2] Percent deviations shown are averages within each decile or quartile.
- [3] Analysis is based on 2006 - 2011 data for Lucasfilm and 2001 - 2011 data for all other defendants.
- [4] Deciles and quartiles are based on the share of employee weighted job-years at each defendant.

Source: Dr. Leamer's backup data and materials.

## Exhibit 7

### There is Substantial Variation in Annual Changes in Job Average Total Compensation at Each Defendant

Sample of Jobs (A Maximum of 50 from Each Defendant)



**Notes:**

- [1] Each dot represents the percent change in the average real total compensation for a given job from the previous year to the current year.
- [2] The jobs selected are the five largest jobs (based on 2001–2011 employment) from each decile in Figures 9–12 of Dr. Leamer’s Supplemental Report. If there are fewer than five jobs in any decile, then the next largest jobs across all deciles are included to reach 50. In addition, I require that the average number of employees in the job across the two years over which I calculate the compensation change to be at least five.
- [3] Annual changes are capped at –50 and +75 percent.
- [4] Lucasfilm data are missing job titles prior to 2006.

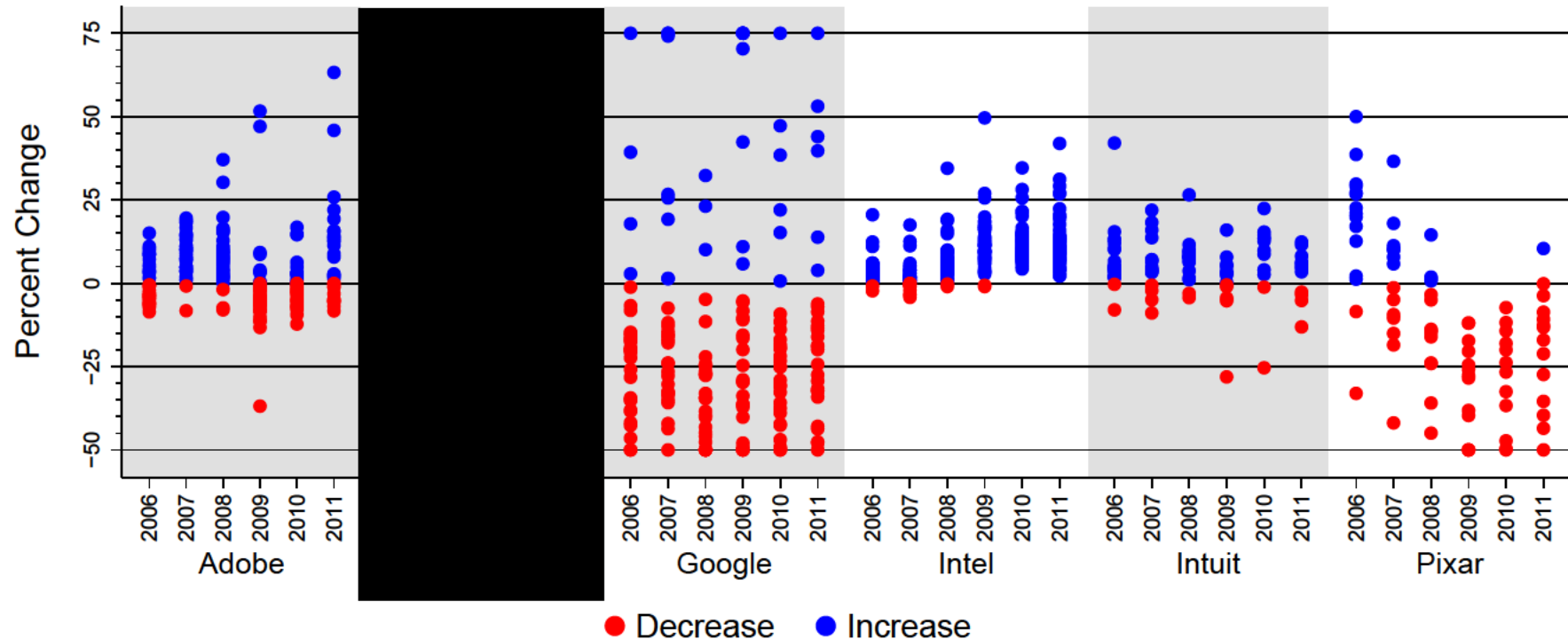
Source: Dr. Leamer’s backup data and materials.



## Exhibit 8

### There is Substantial Variation in Cumulative Changes in Job Average Total Compensation at Each Defendant

Sample of Jobs (A Maximum of 50 from Each Defendant), Base Year = 2005



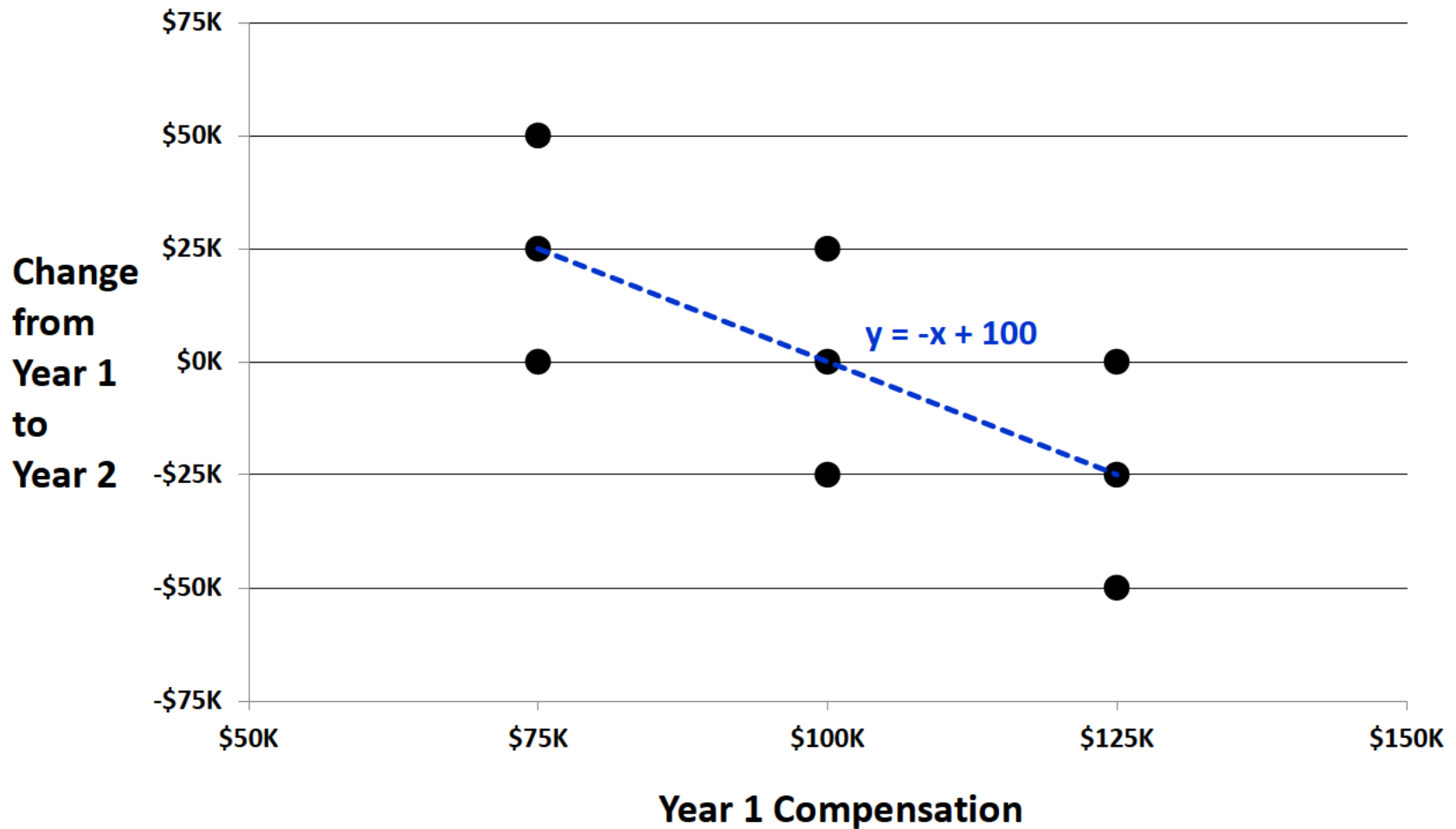
**Notes:**

- [1] Each dot represents the percent change in the average real total compensation for a given job from the previous year to the current year.
- [2] The jobs selected are the five largest jobs (based on 2001–2011 employment) from each decile in Figures 9–12 of Dr. Leamer's Supplemental Report. If there are fewer than five jobs in any decile, then the next largest jobs across all deciles are included to reach 50. In addition, I require that the average number of employees in the job across the two years over which I calculate the compensation change to be at least five.
- [3] Cumulative changes are capped at –50 and +75 percent.
- [4] Lucasfilm is excluded because its data are missing job titles prior to 2006.

Source: Dr. Leamer's backup data and materials.

## Exhibit 9

**"Reversion to the Mean" Implies Negative Relationship Between Expected Compensation Change and Lagged Compensation Level**



# Exhibit 10

## Dr. Leamer's Regression Model Does Not Establish "Sharing" or "Catch-Up" between Jobs

### Panel A: Leamer Model Using Defendants' Data

Number of Job Titles 889

#### Dependent Variable

DLog(Title Average Annual Total Compensation)

#### "Contemporaneous Effect Variable"

DLog(R&D Average Annual Total Compensation)

#### "Lagged Effect Variable"

Log(R&D Avg Annual Total Comp (-1) /  
Title Avg Annual Total Compensation (-1))

#### "External Forces Variables"

Log(Firm Revenue Per Employee (-1) /  
Title Avg Annual Total Compensation (-1))

DLog(San-Jose Information Sector Employment)

#### Coefficient Estimate

0.72

0.41

0.12

-0.20

### Panel B: Leamer Model Using U.S. Economy-Wide Data (ACS)

Number of U.S. Occupations 465

#### Dependent Variable

DLog(Occupation Average Annual Wage)

#### "Contemporaneous Effect Variable"

Dlog(U.S. Average Annual Wage)

#### "Lagged Effect Variable"

Log(U.S. Avg Annual Wage (-1) /  
Occupation Avg Annual Wage (-1))

#### "External Forces Variables"

Log(U.S. Real GDP per Worker (-1) /  
Occupation Avg Annual Wage (-1))

DLog(U.S. Total Employment)

#### Coefficient Estimate

1.09

1.32

-0.14

0.03

Notes: Coefficient estimates shown are weighted averages across regressions for all job titles or occupations.

Source: Panel A is based on Leamer Supplemental Report Exhibits 1 and 2. Panel B is based on data from the following public sources:

American Community Surveys (ACS), 2001-2010: Steven Ruggles, J. Trent Alexander, Katie Genadek, Ronald Goeken, Matthew B. Schroeder, Matthew Sobek.

Integrated Public Use Microdata Series: Version 5.0 [Machine-readable database]. Minneapolis: University of Minnesota, 2010, <https://usa.ipums.org>.

U.S. Real GDP (GDPC1): U.S. Department of Commerce Bureau of Economic Analysis. U.S. Total Employment (LNU02000000): U.S. Department of Labor Bureau of Labor Statistics.

# Exhibit 11

## Dr. Leamer's Decile-Based Regressions Do Not Establish "Sharing" or "Catch-Up" between Jobs

**Panel A: Leamer Model Using Defendants' Data**

Decile	Regression Coefficient Estimates			
	"Contemporaneous Sharing"	"Catch-Up"	"External Variable 1" (Firm Revenue)	"External Variable 2" (San Jose IT Employment)
1	0.60	0.37	-0.27	0.19
2	0.55	0.28	-0.09	-0.07
3	0.71	0.40	-0.18	0.13
4	0.58	0.20	0.01	0.05
5	0.73	0.24	0.04	0.04
6	0.66	0.36	0.12	-0.36
7	0.75	0.33	-0.02	-0.07
8	0.71	0.36	0.29	-0.52
9	0.85	0.47	0.15	-0.18
10	1.13	0.04	0.61	-0.37
Average:	0.73	0.31	0.07	-0.12

**Panel B: Leamer Model Using U.S. Economy-Wide Data (ACS)**

Decile	Regression Coefficient Estimates			
	"Contemporaneous Sharing"	"Catch-Up"	"External Variable 1" (U.S. GDP)	"External Variable 2" (U.S. Employment)
1	1.36	1.54	-0.48	0.10
2	0.94	1.12	-0.36	-0.28
3	0.85	0.85	-0.12	-0.36
4	1.18	1.74	-0.34	0.16
5	0.86	1.35	-0.21	0.00
6	0.81	0.62	-0.10	-0.25
7	0.84	1.16	0.19	-0.17
8	1.02	0.91	0.15	0.31
9	1.56	0.37	0.36	-0.57
10	0.57	0.92	0.54	-0.02
Average:	1.00	1.06	-0.04	-0.11

Notes: Estimates shown in Panel A are weighted averages across defendants. Deciles in Panel B are defined according to a similar methodology as Dr. Leamer's decile-based analyses, using U.S. occupation's overall average real wage and employment.

Source: Panel A is based on Dr. Leamer's backup materials for Leamer Supplemental Report Figures 9 to 12. Panel B is based on data from the following public sources:

American Community Surveys (ACS), 2001-2010: Steven Ruggles, J. Trent Alexander, Katie Genadek, Ronald Goeken, Matthew B. Schroeder, Matthew Sobek.

Integrated Public Use Microdata Series: Version 5.0 [Machine-readable database]. Minneapolis: University of Minnesota, 2010, <https://usa.ipums.org>.

U.S. Real GDP (GDPC1): U.S. Department of Commerce Bureau of Economic Analysis. U.S. Total Employment (LNU02000000): U.S. Department of Labor Bureau of Labor Statistics.

## Exhibit 12

### Dr. Leamer's Interpretation of His Regression Results Would Imply that Changes in Chicago Temperature Can be Explained by "Sharing" or "Catch-Up" with Milwaukee Temperature (and Vice Versa)

(Chicago and Milwaukee Daily Temperature Data - January 1995 to May 2013)

Dependent Variable: Change in Chicago Temperature

Variable	Model 1	Model 2	Model 3
	<b>Coefficient Estimates</b>		
<b>Change in Milwaukee Temperature</b>	0.94		0.93
<b>Lagged Difference in Temperature (Milwaukee minus Chicago)</b>	0.48		0.56
<b>January</b>		-0.20	0.64
<b>February</b>		0.27	0.91
<b>March</b>		0.45	1.51
<b>April</b>		0.28	1.96
<b>May</b>		0.37	2.20
<b>June</b>		0.19	1.76
<b>July</b>		0.11	1.38
<b>August</b>		-0.17	0.99
<b>September</b>		-0.40	0.77
<b>October</b>		-0.30	0.69
<b>November</b>		-0.43	0.68
<b>December</b>		-0.20	0.55
Constant	Yes	No	No
R-Squared	0.89	0.00	0.89
Number of Observations	6,633	6,692	6,633

Dependent Variable: Change in Milwaukee Temperature

Variable	Model 1	Model 2	Model 3
	<b>Coefficient Estimates</b>		
<b>Change in Chicago Temperature</b>	0.94		0.95
<b>Lagged Difference in Temperature (Chicago minus Milwaukee)</b>	0.46		0.54
<b>January</b>		-0.19	-0.64
<b>February</b>		0.25	-0.85
<b>March</b>		0.34	-1.42
<b>April</b>		0.27	-1.86
<b>May</b>		0.37	-2.08
<b>June</b>		0.26	-1.67
<b>July</b>		0.11	-1.32
<b>August</b>		-0.19	-0.98
<b>September</b>		-0.38	-0.79
<b>October</b>		-0.31	-0.70
<b>November</b>		-0.44	-0.70
<b>December</b>		-0.18	-0.56
Constant	Yes	No	No
R-Squared	0.88	0.00	0.89
Number of Observations	6,633	6,637	6,633

Source: <http://academic.udayton.edu/kissock/http/Weather/citylistUS.htm>.